

REMARKS

Claims 1-5, 8-11, 13-16, and 18-20 are pending in this application. Claims 6 and 7 have been canceled. Claims 19 and 20 have been added. Claims 1, 13, and 18 are independent.

Claim Objections

Claims 1, 13, and 18 have been objected to because of minor informalities. Accordingly, amendments have been made to the independent claims to clarify the respective preambles and to include “an” before (n+...) level, as requested. Applicants respectfully request that the objections be withdrawn.

Claim Rejections – 35 USC 101

Claims 1-11, 14-16, and 18 have been rejected under 35 U.S.C. 101 because the claims are directed to non-statutory subject matter. Applicants have amended claim 1 to be directed to the patentable category of a “computer implemented method” and claim 18 to be directed to the patentable category of a “computer.” Also, claims 1 and 18 specifically recite a practical application of comparing conformation codes of molecules in order to determine if conformation for molecules is the same, or portions of molecules have the same conformation. Accordingly, Applicants submit that the claims are directed to statutory subject matter and respectfully request that the rejection be withdrawn.

Claims 1-11, 13-16, and 18 have been rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. The present claimed invention as amended is directed to a computer implemented method, computer-readable storage medium and associated computer for coding stereochemical molecular information and comparing molecules to determine if molecules have the same conformation based on the coded information, or sections having the same conformation. In the present invention, the definition of the term "molecule" is accordance with the ordinary definition found in any standard chemical dictionary, and the present invention uses standard symbols for atoms obtained from the standard periodic table of the elements.

Thus, for example, the present invention provides an automated technique for comparing conformation of two molecules in order to determine if the two molecules have the same conformation. Applicants submit that the present invention's pattern matching over linear sequences of symbols in determining if two molecules, or portions thereof, have the same conformation provides an "immediately useful" result. Accordingly, Applicants submit that the present claimed invention has practical utility and respectfully request that the rejection be withdrawn.

Claim Rejections – 35 USC 112, first paragraph

Claims 1-11, 13-16, and 18 have been rejected under 35 U.S.C. 112, first paragraph, as lacking sufficient disclosure to enable one of ordinary skill in the art to use the present invention.

As mentioned in the above, Applicants have amended the claims to recite a specific utility of comparing conformation of molecules in order to determine if molecules have the same conformation or if sections have the same conformations. Disclosure of the use for comparing conformation of molecules is provided, for example, with respect to Figure 30, described in pages 22 and 23 of the specification. Applicants submit that sufficient information is disclosed to enable one of ordinary skill in the art to use the invention and respectfully request that the rejection be withdrawn.

Claims 1-11 and 13-16 have been rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement; i.e., present new matter.

Applicants have amended claims 1 and 13 to remove the language believed to be new matter. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim Rejection – 35 USC 112, second paragraph

Claims 1-11, 13-16, and 18 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

Accordingly, Applicants have amended the claims in order to address concerns with each of the phrases mentioned in the Office Action. Applicants submit that the claims are definite and respectfully request that the rejection be withdrawn.

Claims 6 and 7 have been canceled. However, claim 8 remains and recites "CANOST code linear notation". Claim 8 has been amended to express a specific definition for CANOST code linear notation as being a linear list of symbols which express the bonding relationship between a plurality of atoms (e.g., see specification at page 12, lines 25-33).

New Claims

Claim 19 further limits the invention of claim 1 to coding and comparing organic molecules. For at least the same reasons as above for claim 1, Applicants submit that claim 19 is patentable as well.

Claim 20 further limits the invention of claim 1 to coding and comparing Sugar molecules. Sugar molecules are disclosed in the present specification as an example embodiment of the present invention. For at least the same reasons as above for claim 1, Applicants submit that claim 20 is patentable as well.

Conclusion

In view of the above amendments and comments, Applicants respectfully submit that the claims are in condition for allowance. A notice to such effect is earnestly solicited.

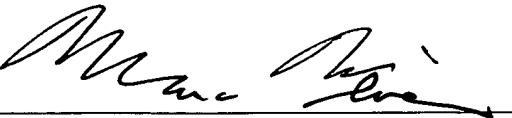
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert w. Downs (Reg. No. 48,222) at the telephone number of the undersigned below.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants respectfully petition for a one (1) month extension of time for filing a response in connection with the present application and the required fee of \$110.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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